

Purchasing Receipts

Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246



PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
P0042340	MCM001-VU	1	1	2% 10 Net 30	51495K116	COUPLING 1/2" NCKL PLTD BRASS				30	1/25/2019	30		S147991	Stock	1/25/2019	\$ 7.76 / Ea	0		\$233.40	McMaster-Carr Supply Co.
		2			5267T114	O-Ring receive ea				10		10		S147993	Stock	1/25/2019	\$ 0.83 / Ea	0		\$8.29	McMaster-Carr Supply Co.
		3			6519T14	Tubing D5528-1 : AS PER DWG D5528 REV. A PCS OF 10 FT LONG REQUIRED				2		2		S148166	Inactive	1/25/2019	\$ 49.70 / Ea	0		\$99.40	McMaster-Carr Supply Co.
		4			7113K341	Ring Terminal, 16-14ga				100		100		S147998	Stock	1/25/2019	\$ 0.11 / Ea	0		\$10.54	McMaster-Carr Supply Co.
		5			7132K111	Heat Shrink, Chemical Resistant, Black				5		5		S148002	Stock	1/25/2019	\$ 0.76 / Ea	0		\$3.82	McMaster-Carr Supply Co.
		6			8486K481	Clear Cast Acrylic Tube, 4-1/2" O.D. x 4-1/8" I.D.				3		3		S147945	Stock	1/25/2019	\$ 49.37 / ft	0		\$148.11	McMaster-Carr Supply Co.
		7			86015K11	Neoprene Rubber Sheet, 12" x 12" x 1/16" Thick, (60A Medium Hard)						3		S148006	Stock	1/25/2019	\$ 8.47 / sf	0		\$25.41	McMaster-Carr Supply Co.
		8			8733K67	Off White Nylon Bar 1" Thick, 3" Wide				4			4	S147946	Stock	1/25/2019	\$ 31.28 / ft	0		\$125.12	McMaster-Carr Supply Co.
		9			88625K65	Dowel Pin Ø6mm x 40mm				3		3		S147947	Stock	1/25/2019	\$ 1.49 / ft	0		\$4.47	McMaster-Carr Supply Co.
		10			8876T13	Loop Clamp for 1/4" O.D., White				100			100	S148005	Stock	1/25/2019	\$ 0.06 / Ea	0		\$6.10	McMaster-Carr Supply Co.
		11			89495K255	304 Stainless Steel Round Tube, 0.12" Wall Thickness, 1-1/2" OD				4			4	S147950	Stock	1/25/2019	\$ 46.03 / ft	0		\$184.11	McMaster-Carr Supply Co.
		12			90081A077	Drive Screw #2 1/4" Long				100			100	S148008	Stock	1/25/2019	\$ 0.04 / Ea	0		\$3.67	McMaster-Carr Supply Co.
		13			93000A618	Zinc-Plated Steel Full Threaded Rod M10 x 1.25				3			3	S147959	Stock	1/25/2019	\$ 12.22 / ft	0		\$36.67	McMaster-Carr Supply Co.

PO No	Supplier Item No	Line No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		14			91415A225	Zinc-Plated Steel Hex Nut M10 x 1.25				50		50		S148043	Stock	1/25/2019	\$ 0.23 / Ea	0		\$11.42	McMaster-Carr Supply Co.
		15										50		S148046	Stock	1/25/2019	\$ 0.23 / Ea	0		\$11.42	McMaster-Carr Supply Co.
		16			90174A113	Retaining Pin				25		25		S148041	Stock	1/25/2019	\$ 0.28 / Ea	0		\$6.89	McMaster-Carr Supply Co.
		17			M4130NS.188	4130 Sheet .188 : MATERIAL: AISI 4130N STEEL SHEET AS PER OR AS PER AMS 6345 MIL-S-18729 OR AMS 6350 OR AMS 6351 receive sf				9		9		S147963	Stock	1/25/2019	\$ 22.03 / sf	0		\$198.25	McMaster-Carr Supply Co.
		18			MBRONZR1.000	Bronze Round Bar 1.000" : MATERIAL: OIL IMPREGNATED SINTERED BRONZE ROUND BAR AS PER SAE 841 TYPE 1, CLASS A OR AMS 4805 OR ASTM B438 GRADE 1, TYPE 2 OR MIL-8-5687D TYPE 1, GRADE 1 receive ft				1		1		S147966	Stock	1/25/2019	\$ 60.19 / ft	0		\$65.00	McMaster-Carr Supply Co.
		19			90126A030	Flat Washer				190		190		S148036	Stock	1/25/2019	\$ 0.03 / Ea	0		\$5.79	McMaster-Carr Supply Co.
		22			91251A435	Socket Head Cap Screw receive ea				50		50		S148048	Stock	1/25/2019	\$ 0.19 / Ea	0		\$9.26	McMaster-Carr Supply Co.
		23			91257A481	Hex Head Screw 7/16"-20 x 6" LG.				10		10		S148050	Stock	1/25/2019	\$ 2.63 / Ea	0		\$26.30	McMaster-Carr Supply Co.
		24			91735A243	Phillips Pan Head Screw 10-24 X 5/8" receive ea				25		25		S148052	Stock	1/25/2019	\$ 0.30 / Ea	0		\$7.46	McMaster-Carr Supply Co.
		25			91735A829	Phillips Head Screw 10-32 X 1/2" receive ea						25		S148056	Stock	1/25/2019	\$ 0.20 / Ea	0		\$4.95	McMaster-Carr Supply Co.
		26			91772A245	Phillips Head Screw receive ea				100		100		S148058	Stock	1/25/2019	\$ 0.12 / Ea	0		\$12.03	McMaster-Carr Supply Co.
		27			91772A251					50		50		S148060	Stock	1/25/2019	\$ 0.18 / Ea	0		\$9.20	McMaster-Carr Supply Co.

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		28			9192K1	Single Conductor Wire 14ga						50		S147967	Stock	1/25/2019	\$ 1.56 / ft	0		\$78.00	McMaster-Carr Supply Co.
		29			92005A318	Screw M5 x 8mm				100		100		S148077	Stock	1/25/2019	\$ 0.05 / Ea	0		\$4.60	McMaster-Carr Supply Co.
		30			92141A031	Washer receive ea						100		S148063	Stock	1/25/2019	\$ 0.05 / Ea	0		\$5.34	McMaster-Carr Supply Co.
		31			92185A540	Socket Head Cap Screw receive ea				10				S148079	Stock	1/25/2019	\$ 0.34 / Ea	0		\$3.39	McMaster-Carr Supply Co.
		32			9263K642	O-Ring receive ea				30		30		S148081	Stock	1/25/2019	\$ 0.57 / Ea	0		\$17.22	McMaster-Carr Supply Co.
		33			94407A103	Nylon Lock Nut 10-24 receive ea				100		100		S148085	Stock	1/25/2019	\$ 0.10 / Ea	0		\$9.93	McMaster-Carr Supply Co.
		34			AS568A-343	Viton Fluorocastomer O-Ring, 4.142 O.D. X 3.725 I.D. X 0.210				6		6		S148088	Stock	1/25/2019	\$ 3.28 / Ea	0		\$19.65	McMaster-Carr Supply Co.
		35			M6061T6H0.312	6061-T6 Hex Bar .312 : MATERIAL: 6061-T6T65176510T6511762 ALUMINUM HEX BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						6		S147968	Stock	1/25/2019	\$ 2.02 / ft	0		\$12.11	McMaster-Carr Supply Co.
		36			MDLRLINB1.500X3.000W	M Delrin Bar, White					12	12		S147969	Stock	1/25/2019	\$ 40.24 / ft	0		\$482.88	McMaster-Carr Supply Co.
		37			MDLRLINR0.375	M Delrin Round Bar, Black					5	5		S147970	Stock	1/25/2019	\$ 0.74 / ft	0		\$3.70	McMaster-Carr Supply Co.
		38			98410A350	Steel External Retaining Ring for 3-1/2" OD					4	4		S148089	Stock	1/25/2019	\$ 4.40 / Ea	0		\$17.60	McMaster-Carr Supply Co.
		39			94895A805	Steel Hex Nut 1/4"-28					100	100		S148090	Stock	1/25/2019	\$ 0.05 / Ea	0		\$4.68	McMaster-Carr Supply Co.
		40			1374N23	60A Durometer					1	1		S148097	Stock	1/25/2019	\$ 20.08 / Ea	0		\$20.08	McMaster-Carr Supply Co.

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		41			89955K839	Bar			6		6		S147971	Stock	1/25/2019	\$ 10.00 / ft	0		\$60.02	McMaster-Carr Supply Co.
		42			90177A215	Steel Split Ring 1 1/16" OD x 1 1/2" ID x 1/8" Thk.			50		50		S148104	Stock	1/25/2019	\$ 0.21 / Ea	0		\$10.54	McMaster-Carr Supply Co.
		43			9487K52	Water and Steam Resistant Cork Gasket, Adhesive Back, 3/32" Thick x 12" x 36"			3		3		S147972	Stock	1/25/2019	\$ 2.77 / sf	0		\$8.32	McMaster-Carr Supply Co.
		44			T-8816968011	Rivet			100		100		S148113	Stock	1/25/2019	\$ 0.06 / pcs	0		\$6.05	McMaster-Carr Supply Co.
		45			T-8816968012						100		S148116	Stock	1/25/2019	\$ 0.06 / pcs	0		\$5.63	McMaster-Carr Supply Co.
		46			T-8816968019	Jomar Valve			2		2		S148123	Stock	1/25/2019	\$ 8.27 / pcs	0		\$16.54	McMaster-Carr Supply Co.
		47			T-8816968021	Compression Fitting					2		S148127	Stock	1/25/2019	\$ 2.52 / pcs	0		\$5.04	McMaster-Carr Supply Co.
		48			T-8816968023	Threaded Hose Connector			10		10		S148133	Stock	1/25/2019	\$ 1.37 / pcs	0		\$13.69	McMaster-Carr Supply Co.
		49			T-8816968025	AN Flared Tube Nut			6		6		S148140	Stock	1/25/2019	\$ 3.50 / pcs	0		\$21.00	McMaster-Carr Supply Co.
		50			T-8816968027	AN Flared Tube Sleeve					6		S148143	Stock	1/25/2019	\$ 1.40 / pcs	0		\$8.40	McMaster-Carr Supply Co.
		51			91180A381	Bolt M14 X 1.5 X 60mm			8		8		S148144	Stock	1/25/2019	\$ 3.34 / Ea	0		\$26.72	McMaster-Carr Supply Co.
		52			92005A215	Pan Head Machine Screw, M4 X 0.7 X 6mm			100		100		S148145	Stock	1/25/2019	\$ 0.03 / Ea	0		\$3.44	McMaster-Carr Supply Co.
		53			MT-BRASS-C360-R0.5625	Brass C360 Round Bar 0.5625"			6		6		S147973	Stock	1/25/2019	\$ 7.89 / ft	0		\$47.32	McMaster-Carr Supply Co.
Total:											1,875								\$2,168.97	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042340



Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

PO No: PO042340

PO Date: 1/21/19

Due Date: 1/25/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments: *REVISED*
Item #3 -

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
3		6519T14		Tubing D5528-1 : AS PER DWG D5528 REV. A PCS OF 10 FT LONG REQUIRED 2 pcs of 10 ft	Firmed	-	1/25/19	2 Ea	0 Ea	2 Ea	\$49.70/Ea	\$99.40
				9 rolls of 50 ft, bring to Sylvie in GA	Firmed	-	1/30/19	43 Ea 45 ea	0 Ea	43 Ea	\$49.70/Ea	\$2,137.10
Sub Total:								45	0	45		\$2,236.50
21		90480A235	100/pk	Hex Nut receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0842/Ea	\$8.42
22		91251A435	50/pk	Socket Head Cap Screw receive ea	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.1852/Ea	\$9.26
23		91257A481	5/pk	Hex Head Screw 7/16"-20 x 6" LG.	Firmed	-	1/25/19	10 Ea	0 Ea	10 Ea	\$2.63/Ea	\$26.30
24		91735A243	25/pk	Phillips Pan Head Screw 10-24 X 5/8" receive ea	Firmed	-	1/25/19	25 Ea	0 Ea	25 Ea	\$0.2984/Ea	\$7.46
25		91735A829	25/pk	Phillips Head Screw 10-32 X 1/2" receive ea	Firmed	-	1/25/19	25 Ea	0 Ea	25 Ea	\$0.198/Ea	\$4.95
26		91772A245	100/pk	Phillips Head Screw receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.1203/Ea	\$12.03
27		91772A251	50/pk	Phillips Head Screw receive ea	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.184/Ea	\$9.20

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042340



Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
29		92005A318	50/pk	Screw M5 x 8mm	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.046/Ea	\$4.60
30		92141A031	100/pk	Washer receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0534/Ea	\$5.34
31		92185A540	10/pk	Socket Head Cap Screw receive ea	Firmed	-	1/25/19	10 Ea	0 Ea	10 Ea	\$0.339/Ea	\$3.39
32		9263K642	10/pk	O-Ring receive ea	Firmed	-	1/25/19	30 Ea	0 Ea	30 Ea	\$0.574/Ea	\$17.22
33		94407A103	100/pk	Nylock Lock Nut 10-24 receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0993/Ea	\$9.93
34		AS568A-343	9464k173 2/pk	Viton Fluoroelastomer O-Ring, 4.142 O.D. X 3.725 I.D. X 0.210	Firmed	-	1/25/19	6 Ea	0 Ea	6 Ea	\$3.275/Ea	\$19.65
38		98410A350	1/pk	Steel External Retaining Ring for 3-1/2" OD	Firmed	-	1/25/19	4 Ea	0 Ea	4 Ea	\$4.40/Ea	\$17.60
39		94895A805	100/pk	Steel Hex Nut 1/4"-28	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0468/Ea	\$4.68
40		1374N23	12" x 12" x 1/16"	60A Durometer	Firmed	-	1/25/19	1 Ea	0 Ea	1 Ea	\$20.08/Ea	\$20.08
42		90177A215	50/pk	Steel Split Ring 11/16" OD x 1/2" ID. x 1/8" Thk.	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.2108/Ea	\$10.54
44		T-8816968011	97447A317 100/PK	Rivet	Firmed	-	1/25/19	100 pcs	0 pcs	100 pcs	\$0.0605/pcs	\$6.05
45		T-8816968012	97447A315 100/PK	Rivet	Firmed	-	1/25/19	100 pcs	0 pcs	100 pcs	\$0.0563/pcs	\$5.63
46		T-8816968019	47865K21 1/PK	Jomar Valve	Firmed	-	1/25/19	2 pcs	0 pcs	2 pcs	\$8.27/pcs	\$16.54
47		T-8816968021	50915K315 1/PK	Compression Fitting	Firmed	-	1/25/19	2 pcs	0 pcs	2 pcs	\$2.52/pcs	\$5.04
48		T-8816968023	5346K18 10/PK	Threaded Hose Connector	Firmed	-	1/25/19	10 pcs	0 pcs	10 pcs	\$1.369/pcs	\$13.69
49		T-8816968025	5482K75 1/PK	AN Flared Tube Nut	Firmed	-	1/25/19	6 pcs	0 pcs	6 pcs	\$3.50/pcs	\$21.00
50		T-8816968027	5482K82 1/PK	AN Flared Tube Sleeve	Firmed	-	1/25/19	6 pcs	0 pcs	6 pcs	\$1.40/pcs	\$8.40
51		91180A381	1/pk	Bolt, M14 X 1.5 X 60mm	Firmed	-	1/25/19	8 Ea	0 Ea	8 Ea	\$3.34/Ea	\$26.72

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Dart Aerospace Ltd.
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PURCHASE ORDER

PO042340



Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
52		92005A215	100/pk	Pan Head Machine Screw, M4 X 0.7 X 6mm	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0344/Ea	\$3.44

Grand Total: \$2,533.66

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

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Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO042340**



Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042340

PO Date: 1/21/19

Due Date: 1/25/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments:

REVISED

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		51495K116	1/pk	COUPLING 1/2" NCKL PLTD BRASS	Firmed	-	1/25/19	30 Ea	0 Ea	30 Ea	\$7.78/Ea	\$233.40
2		5267T114	10/pk	O-Ring receive ea	Firmed	-	1/25/19	10 Ea	0 Ea	10 Ea	\$0.829/Ea	\$8.29
3		6519T14		Tubing D5528-1 AS PER DWG D5528 REV. A PCS OF 10 FT LONG REQUIRED	Firmed	-	1/25/19	45 Ea	0 Ea	45 Ea	\$49.70/Ea	\$2,236.50
Line Item Note note 45 pcs of 10 ft required												
4		7113K341	100/pk	Ring Terminal, 16-14ga	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.1054/Ea	\$10.54
5		7132K111	5/pk	Heat Shrink, Chemical Resistant, Black	Firmed	-	1/25/19	5 Ea	0 Ea	5 Ea	\$0.764/Ea	\$3.82
6		8486K481	3 ft long	Clear Cast Acrylic Tube, 4- 1/2" O.D. x 4-1/8" I.D.	Firmed	-	1/25/19	3 ft	0 ft	3 ft	\$49.37/ft	\$148.11
7		86015K11		Neoprene Rubber Sheet, 12" x 12" x 1/16" Thick, (60A Medium Hard)	Firmed	-	1/25/19	3 sf	0 sf	3 sf	\$8.47/sf	\$25.41
Line Item Note 3 pcs												
8		8733K67	4 ft long	Off White Nylon Bar 1" Thick, 3" Wide	Firmed	-	1/25/19	4 ft	0 ft	4 ft	\$31.28/ft	\$125.12
9		88625K65	3 ft long	Dowel Pin Ø6mm x 40mm	Firmed	-	1/25/19	3 ft	0 ft	3 ft	\$1.49/ft	\$4.47
10		8876T13	100/pk	Loop Clamp for 1/4" O.D., White	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.061/Ea	\$6.10
11		89495K255	4 ft long	304 Stainless Steel Round Tube, 0.12" Wall Thickness, 1-1/2" OD	Firmed	-	1/25/19	4 ft	0 ft	4 ft	\$46.0275/ft	\$184.11
12		90081A077	100/pk	Drive Screw #2 1/4" Long	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0367/Ea	\$3.67
13		93000A618	1 m / 3 ft	Zinc-Plated Steel Full Threaded Rod M10 x 1.25	Firmed	-	1/25/19	3 ft	0 ft	3 ft	\$12.22333/ft	\$36.67



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PURCHASE ORDER PO042340



Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
14		91415A225	50/pk	Zinc-Plated Steel Hex Nut M10 x 1.25	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.2284/Ea	\$11.42
15		91415A225	50/pk	Zinc-Plated Steel Hex Nut M10 x 1.25	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.2284/Ea	\$11.42
16		90174A113	25/pk	Retaining Pin	Firmed	-	1/25/19	25 Ea	0 Ea	25 Ea	\$0.2756/Ea	\$6.89
17		M4130NS.188	4459T29	4130 Sheet .188 : MATERIAL: AISI 4130N STEEL SHEET AS PER OR AS PER AMS 6345 MIL-S-18729 OR AMS 6350 OR AMS 6351 receive sf	Firmed	-	1/25/19	9 sf	0 sf	9 sf	\$22.02777/sf	\$198.25
Line Item Note: 1 pcs of 36" x 36"												
18		MBRONZR1.000	8932K45 6.5" long	Bronze Round Bar 1.000" : MATERIAL: OIL IMPREGNATED SINTERED BRONZE ROUND BAR AS PER SAE 841 TYPE 1, CLASS A OR AMS 4805 OR ASTM B438 GRADE 1, TYPE 2 OR MIL-B-5687D TYPE 1, GRADE 1 receive ft	Firmed	-	1/25/19	1.083 ft	0 ft	1 ft	\$60.185185/ft	\$65.18
19		90126A030	190/PK	Flat Washer	Firmed	-	1/25/19	190 Ea	0 Ea	190 Ea	\$0.0304736/Ea	\$5.79
20		90273A559	50/pk	Flat Head Machine Screw, 1/4-28 UNF X 3/4	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.289/Ea	\$14.45
21		90480A235	100/pk	Hex Nut receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0842/Ea	\$8.42
22		91251A435	50/pk	Socket Head Cap Screw receive ea	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.1852/Ea	\$9.26
23		91257A481	5/pk	Hex Head Screw 7/16"-20 x 6" LG.	Firmed	-	1/25/19	10 Ea	0 Ea	10 Ea	\$2.63/Ea	\$26.30
24		91735A243	25/pk	Phillips Pan Head Screw 10-24 X 5/8" receive ea	Firmed	-	1/25/19	25 Ea	0 Ea	25 Ea	\$0.2984/Ea	\$7.46
25		91735A829	25/pk	Phillips Head Screw 10-32 X 1/2" receive ea	Firmed	-	1/25/19	25 Ea	0 Ea	25 Ea	\$0.198/Ea	\$4.95
26		91772A245	100/pk	Phillips Head Screw receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.1203/Ea	\$12.03
27		91772A251	50/pk	Phillips Head Screw receive ea	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.184/Ea	\$9.20
28		9192K1	50 ft	Single Conductor Wire 14ga	Firmed	-	1/25/19	50 ft	0 ft	50 ft	\$1.56/ft	\$78.00
29		92005A318	50/pk	Screw M5 x 8mm	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.046/Ea	\$4.60
30		92141A031	100/pk	Washer receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0534/Ea	\$5.34
31		92185A540	10/pk	Socket Head Cap Screw receive ea	Firmed	-	1/25/19	10 Ea	0 Ea	10 Ea	\$0.339/Ea	\$3.39
32		9263K642	10/pk	O-Ring receive ea	Firmed	-	1/25/19	30 Ea	0 Ea	30 Ea	\$0.574/Ea	\$17.22



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042340



Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
33		94407A103	100/pk	Nylock Lock Nut 10-24 receive ea	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0993/Ea	\$9.93
34		AS568A-343	9464k173 2/pk	Viton Fluoroelastomer O-Ring, 4.142 O.D. X 3.725 I.D. X 0.210	Firmed	-	1/25/19	6 Ea	0 Ea	6 Ea	\$3.275/Ea	\$19.65
35		M6061T6H0.312	89845K74 6 FT	6061-T6 Hex Bar .312 : MATERIAL:6061-T6/T651/T6510/T6511/T62 ALUMINUM HEX BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	1/25/19	6 ft	0 ft	6 ft	\$2.018333/ft	\$12.11
36		MDELIRNB1.500X3.000W	8739K67 4 FT	M Delrin Bar, White	Firmed	-	1/25/19	12 ft	0 ft	12 ft	\$40.24/ft	\$482.88
37		MDELIRNR0.375	8576K13 5 ft	M Delrin Round Bar, Black	Firmed	-	1/25/19	5 ft	0 ft	5 ft	\$0.74/ft	\$3.70
38		98410A350	1/pk	Steel External Retaining Ring for 3-1/2" OD	Firmed	-	1/25/19	4 Ea	0 Ea	4 Ea	\$4.40/Ea	\$17.60
39		94895A805	100/pk	Steel Hex Nut 1/4"-28	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0468/Ea	\$4.68
40		1374N23	12" x 12" x 1/16"	60A Durometer	Firmed	-	1/25/19	1 Ea	0 Ea	1 Ea	\$20.08/Ea	\$20.08
41		89955K839	6 ft long	Bar	Firmed	-	1/25/19	6 ft	0 ft	6 ft	\$10.00333/ft	\$60.02
42		90177A215	50/pk	Steel Split Ring 1 1/16" OD x 1/2" ID. x 1/8" Thk.	Firmed	-	1/25/19	50 Ea	0 Ea	50 Ea	\$0.2108/Ea	\$10.54
43		9487K52	3sf / pcs	Water and Steam Resistant Cork Gasket, Adhesive Back, 3/32" Thick x 12" x 36"	Firmed	-	1/25/19	3 sf	0 sf	3 sf	\$2.77333/sf	\$8.32
44		T-8816968011	97447A317 100/PK	Rivet	Firmed	-	1/25/19	100 pcs	0 pcs	100 pcs	\$0.0605/pcs	\$6.05
45		T-8816968012	97447A315 100/PK	Rivet	Firmed	-	1/25/19	100 pcs	0 pcs	100 pcs	\$0.0563/pcs	\$5.63
46		T-8816968019	47865K21 1/PK	Jomar Valve	Firmed	-	1/25/19	2 pcs	0 pcs	2 pcs	\$8.27/pcs	\$16.54
47		T-8816968021	50915K315 1/PK	Compression Fitting	Firmed	-	1/25/19	2 pcs	0 pcs	2 pcs	\$2.52/pcs	\$5.04
48		T-8816968023	5346K18 10/PK	Threaded Hose Connector	Firmed	-	1/25/19	10 pcs	0 pcs	10 pcs	\$1.369/pcs	\$13.69
49		T-8816968025	5482K75 1/PK	AN Flared Tube Nut	Firmed	-	1/25/19	6 pcs	0 pcs	6 pcs	\$3.50/pcs	\$21.00
50		T-8816968027	5482K82 1/PK	AN Flared Tube Sleeve	Firmed	-	1/25/19	6 pcs	0 pcs	6 pcs	\$1.40/pcs	\$8.40
51		91180A381	1/pk	Bolt, M14 X 1.5 X 60mm	Firmed	-	1/25/19	8 Ea	0 Ea	8 Ea	\$3.34/Ea	\$26.72
52		92005A215	100/pk	Pan Head Machine Screw, M4 X 0.7 X 6mm	Firmed	-	1/25/19	100 Ea	0 Ea	100 Ea	\$0.0344/Ea	\$3.44
53		MT-BRASS-C360-R0.5625	8953K91 6 ft	Brass C360 Round Bar 0.5625"	Firmed	-	1/25/19	6 ft	0 ft	6 ft	\$7.886666/ft	\$47.32

1/22/2019

PURCHASE ORDER



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

PURCHASE ORDER

PO042340



Tel (613) 632-5200

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
Grand Total:												\$4,329.12

Order Notes

Procurement Quality Clauses
 A005 RIGHT OF ENTRY
 A016 PERSONNEL QUALIFICATION
 A026 CERTIFICATION OF MATERIAL CONFORMANCE
 A032 DOCUMENT SPECIAL REQUIREMENTS
 A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS
 A040 NOTIFICATION OF QUALITY ESCAPE
 A041 QUALITY MANAGEMENT SYSTEM
 A042 DART NOTIFICATION BY SUPPLIER
 A043 RETENTION OF QUALITY DOCUMENTS

 A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
 A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 1/22/19 12:43 PM dart.lavoie.chantal

C2

Chantal Lavoie

From: McMaster-Carr <cle.sales@mcmaster.com>
Sent: Friday, January 25, 2019 11:01 AM
To: Chantal Lavoie
Subject: Confirmation for Your Order PO042340
Attachments: Confirmation for Your Order PO042340.PDF



330-995-5500
330-995-9600 (fax)
cle.sales@mcmaster.com

Order Confirmation

Ship to
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042340

Order Date
1/25/19

Ordered By
Chantal Lavoie

McMaster-Carr Number
6822163

Line	Product	Ordered	Delivers	Price	Total
1	6519T14 Ultra-Chemical-Resistant Versilon PVC Tubing, 3/8" ID, 9/16" OD, 50 Feet Long	450 feet	350 Jan 28 100 Jan 29	4.97 per foot	2,236.50

Merchandise \$2,236.50

Applicable shipping and Canadian GST/HST will be added.

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

McMaster-Carr Supply Company

This e-mail message has been scanned by SEG Cloud

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042340

Page 1 of 3

Order Placed By
Chantal Lavoie

01/22/2019

McMaster-Carr Number
6822163-01

Line	Product	Ordered	Shipped
1	51495K116 Nickel-Plated Brass Push-to-Connect Tube Fitting for Air, Straight Connector, for 1/2" Tube OD	30 Each	30 ✓
2	5267T114 Chemical-Resistant Viton Fluoroelastomer O-Ring, Brown, 3/32 Fractional Width, Dash Number 135, Packs of 10	1 Pack	1 ✓
3	6519T14 Ultra-Chemical-Resistant Versilon PVC Tubing, 3/8" ID, 9/16" OD, 10 Feet Long	450 Feet	20 ✓
4	7113K34 Ring Terminals, Noninsulated, for 16-14 Wire Gauge and Number 6 Screw, Packs of 100, Replaces 7113K341	1 Pack	1 ✓
5	7132K111 Chemical-Resistant Heat-Shrink Tubing, 1/2 Feet Long, 0.63" ID Before Shrinking, Black, Packs of 5	1 Pack	1 ✓
6	8486K481 Clear Cast Acrylic Tube, 4-1/2" OD x 4-1/8" ID, 3 Feet Long	1 Each	1 ✓
7	86015K11 Multipurpose Neoprene Rubber with Buffed Texture, Sheet, 12" x 12", 1/16" Thick	3 Each	3 ✓
8	8733K67 Off-White Nylon Bar, 3" Wide, 1" Thick, 4' Length	4 Feet	4 ✓
9	88625K65 Tight-Tolerance Multipurpose O1 Tool Steel Rod, 6 mm Diameter, 3 Feet Long	1 Each	1 ✓
10	8876T13 Nylon Plastic Loop Clamp, 1/4" ID, 13/16" Long, White, Packs of 100	1 Pack	1 ✓
11	89495K255 304 Stainless Steel Round Tube, 0.12" Thick, 1-1/2" OD, 4 Feet Long	1 Each	1 ✓
12	90081A077 Zinc-Plated Steel Screw Nails for Metal, Plastic and Plywood, Size 2, 1/4" Long, Packs of 100	1 Pack	1 ✓
13	93000A618 Low-Strength Zinc-Plated Steel Threaded Rod, M10 x 1.25 mm Thread Size, 1 M Long	1 Each	1 ✓
14	91415A225 Fine-Thread Zinc-Plated Steel Hex Nut, Medium-Strength, Class 8, M10 x 1.25 mm Thread, Packs of 50	1 Pack	1 ✓
15	91415A225 Fine-Thread Zinc-Plated Steel Hex Nut, Medium-Strength, Class 8, M10 x 1.25 mm Thread, Packs of 50	1 Pack	1 ✓
16	90174A113 Zinc-Plated Steel Coiled Bent-Wire Locking Pins, 1/16" Diameter, 1-1/16" Usable Length, Packs of 25	1 Pack	1 ✓ (26)
17	4459T29 Easy-to-Weld 4130 Alloy Steel with Certification, 36" x 36" x 0.1900"	1 Each	1 ✓
18	8932K45 Oil-Filled 841 Bearing Bronze Rod, 1" Diameter, 6-1/2" Long	2 Each	2 ✓
19	90126A030 Zinc-Plated Steel SAE Washer for 5/16" Screw Size, 0.344" ID, 0.688" OD, Packs of 190	1 Pack	1 ✓ (230)

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042340
Order Placed By
Chantal Lavoie

Page 2 of 3
01/22/2019

McMaster-Carr Number
6822163-01

Line	Product	Ordered	Shipped
21	91251A435 Black-Oxide Alloy Steel Socket Head Screw, 1/4"-28 Thread Size, 3/8" Long, Fully Threaded, Packs of 50	1 Pack	1 ✓
22	91257A481 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 7/16"-20 Thread Size, 6" Long, Packs of 5	2 Packs	2 ✓
23	91735A243 316 Stainless Steel Pan Head Phillips Screw, Super-Corrosion-Resistant, 10-24 Thread Size, 5/8" Long, Packs of 25	1 Pack	1 ✓
24	91735A829 316 Stainless Steel Pan Head Phillips Screw, Super-Corrosion-Resistant, 10-32 Thread Size, 1/2" Long, Packs of 25	1 Pack	1 ✓
25	91772A245 Passivated 18-8 Stainless Steel Pan Head Phillips Screw, 10-24 Thread, 3/4" Long, Packs of 100	1 Pack	1 ✓
26	91772A251 Passivated 18-8 Stainless Steel Pan Head Phillips Screw, 10-24 Thread, 1-1/2" Long, Packs of 50	1 Pack	1 ✓
27	9192K1 14 Gauge Continuous-Flex Wire	50 Feet	50 ✓
28	92005A318 Steel Pan Head Phillips Screw, M5 x 0.8 mm Thread, 8 mm Long, Packs of 100	1 Pack	1 (101) ✓
29	92141A031 18-8 Stainless Steel Washer for 3/8" Screw Size, 0.406" ID, 0.875" OD, Packs of 100	1 Pack	1 (102) ✓
30	92185A540 Super-Corrosion-Resistant 316 Stainless Steel Socket Head Screw, 1/4"-20 Thread Size, 3/4" Long, Packs of 10	1 Pack	1 ✓
31	9263K642 Chemical-Resistant Viton Fluoroelastomer O-Ring, 1.9 mm Wide, 7.8 mm ID, Packs of 10	3 Packs	3 ✓
32	94407A103 18-8 Stainless Steel Nylon-Insert Locknut, Black-Oxide, 10-24 Thread Size, Packs of 100	1 Pack	1 ✓
33	9464K173 Chemical-Resistant Viton Fluoroelastomer O-Ring, 3/16 Fractional Width, Dash Number 343, Packs of 2	3 Packs	3 ✓
34	89845K74 6061 Aluminum Hex Bar, 5/16" Wide, 6 Feet Long	1 Each	1 ✓
35	8739K67 White Delrin® Acetal Resin Oversized Bar, 1-1/2" Thick, 3" Wide, 4' Length	12 Feet	12 ✓
36	8576K13 Black Delrin® Acetal Resin Rod, 3/8" Diameter, 5 Feet Long	5 Feet	5 ✓
37	98410A350 External Retaining Ring for 3-1/2" OD, Zinc Yellow-Chromate-Plated Spring Steel, Packs of 1	4 Packs	4 ✓
38	94895A805 High-Strength Steel Hex Nut, Grade 8, Zinc Yellow-Chromate Plated, 1/4"-28 Thread Size, Packs of 100	1 Pack	1 ✓
39	1374N23 Multipurpose Neoprene Rubber Sheet, Adhesive-Back, with Certificate, 12" x 12", 1/16" Thick, 60A Durometer	1 Each	1 ✓

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042340
Order Placed By
Chantal Lavoie

Page 3 of 3

01/22/2019

McMaster-Carr Number
6822163-01

Line	Product	Ordered	Shipped
40	89955K839 Easy-to-Weld 4130 Alloy Steel Round Tube, 0.120" Wall Thickness, 3/4" OD, 6 Feet Long	1 Each	1 ✓
41	90177A215 Zinc-Plated Steel Split Rings, 11/16" OD, 1/2" ID, 1/8" Thick, Packs of 50	1 Pack	1 ✓
42	9487K52 Water- and Steam-Resistant Cork Gasket Material, Light Duty, 3/32" Thick Adhesive-Back Sheet, 12" x 36"	1 Each	1 ✓
43	97447A317 Aluminum Blind Rivets with Aluminum Mandrel, Large-Diameter Domed Head, 1/8" Diameter, 0.525" Long, Packs of 100	1 Pack	100 ✓
44	97447A315 Aluminum Blind Rivets with Aluminum Mandrel, Large-Diameter Domed Head, 1/8" Diameter, 0.375" Long, Packs of 100	1 Pack	1 ✓
45	47865K21 Brass On/Off Valve with Lever Handle, 1/4 NPT Female	2 Each	2 ✓
46	50915K315 Brass Compression Tube Fitting for Air & Water, Adapter, for 1/4" Tube OD x 1/4 NPTF Male	2 Each	2 ✓
47	5346K18 Brass Barbed Hose Fitting, 3/8" Hose ID, 1/4 NPTF Male End, Packs of 10	1 Pack	1 ✓
48	5482K75 304 Stainless Steel Nut for 1/4" Tube OD Precision AN 37 Degree Flared Fitting	6 Each	6 ✓
49	5482K82 304 Stainless Steel Sleeve for 1/4" Tube OD Precision AN 37 Degree Flared Fitting	6 Each	6 ✓
50	91180A381 Medium-Strength Class 8.8 Steel Hex Head Screw, M14 x 1.5 mm Thread, 60 mm Long, Fully Threaded, Packs of 1	8 Packs	8 ✓
51	92005A215 Steel Pan Head Phillips Screw, M4 x 0.7 mm Thread, 6 mm Long, Packs of 100	1 Pack	1
52	8953K91 Ultra-Machinable 360 Brass Rod, 9/16" Diameter, 6 Feet Long	1 Each	1 ✓

Expected to ship

3	6519T14 Ultra-Chemical-Resistant Versilon PVC Tubing, 3/8" ID, 9/16" OD, 10 Feet Long	450 Feet	430 by Mar 5
20	90480A235 Low-Strength Steel Hex Nut, 3/8"-24 Thread Size, 5/8" Width, 1/4" Height	1 Pack	1 Jan 25-30

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 8486K481
 DATE: 1/9/28

PO / BATCH NO.: P0042340/5147945

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 3ft
 QUANTITY INSPECTED: 3ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: ~~4.125~~ 0.1875"
 THICKNESS RECEIVED: ~~4.125~~ 0.1875"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	Y N	<i>No drawing</i>
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	<i>P0042340</i>
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> DATE: <u>1/9/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 8733K67
DATE: 19/01/28

PO / BATCH NO.: P0042340/S147946

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 4ft
QUANTITY INSPECTED: 4ft
QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.00"
THICKNESS RECEIVED: 1.000"
SHEET SIZE ORDERED: —
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>N</u>	
CORRECT FINISH	<u>Y</u>	N	
CORROSION	Y	<u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u>	N	<u>No drawing</u>
CORRECT THICKNESS	<u>Y</u>	N	
PHOTO REQUIRED	Y	<u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u>	N	<u>P0042340</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u>	N	
CORRECT M# ON THE MATERIAL	<u>Y</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> DATE: <u>19/01/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 89445K255
 DATE: 19/01/28

PO / BATCH NO.: P0042340/5147950

MATERIAL CERT REC'D: 1/5
 QUANTITY RECEIVED: 4ft
 QUANTITY INSPECTED: 4ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500"
 THICKNESS RECEIVED: 1.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	No drawing
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0042340
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

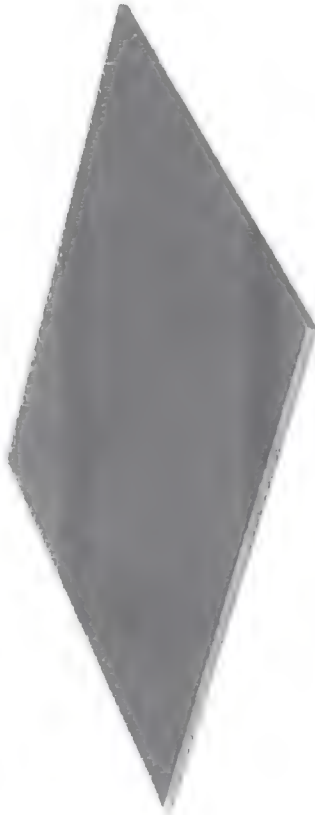
QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>51</u> DATE: <u>19/01/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Easy-to-Weld 4130 Alloy Steel
with Certification, 36" x 36" x 0.1900"

\$198.25 Each
4459T29



Material	4130 Alloy Steel
Cross Section Shape	Rectangle
Construction	Solid
Appearance	Plain
Thickness	0.19"
Thickness Tolerance	-0.009" to 0.009"
Tolerance Rating	Standard
Width	36"
Width Tolerance	-1/16" to 1/16"
Length	36"
Length Tolerance	-1/16" to 1/16"
Yield Strength	50,000 psi
Fabrication	Hot Rolled
Temper Rating	Softened (Annealed)
Hardness	Rockwell B85
Hardness Rating	Medium
Heat Treatable	Yes
Maximum Hardness after Heat Treatment	Rockwell C60
Certification	Material Certificate with Traceable Lot Number and Test Report
Temperature Range	Not Rated
Specifications Met	AMS 6350, AMS 6351
Flatness Tolerance	Not Rated
Density	0.28 lbs./cu. in.
Surface Resistivity	22.3 microhm-cm @ 68° F
Coefficient of Thermal Expansion	7.6 x 10 ⁻⁶

Elongation	26.5%
Material Composition	
Aluminum	0.039%
Iron	94.53-98.23%
Carbon	0.27-0.34%
Chromium	0.80-1.15%
Copper	0-0.25%
Hydrogen	0-2 ppm Max.
Manganese	0.35-0.60%
Molybdenum	0.15-0.25%
Nickel	0-0.25%
Niobium	0.05% Max.
Phosphorus	0.011-0.035%
Silicon	0.15-0.40%
Sulfur	0.002-0.04%
Titanium	0.03% Max.
Vanadium	0-0.035%
RoHS	Compliant

All come with a traceable lot number and test report. 4130 alloy steel has a low carbon content for good weldability. It's often used for gears, fasteners, and structural applications.



DESIGN BRADLEY	DRAWN BY BRADLEY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. M4130N-S	REV. A SHEET 1 OF 1
DATE 01.05.17		TITLE 4130 SHEET SPEC.	

PURCHASE - AISI 4130N STEEL SHEET
PER ONE THE FOLLOWING
SPEC'S : MIL-8-18729, AMS
OR AMS 6351

[illegible]

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130NS.188
 DATE: 19/01/28

PO / BATCH NO.: P0042340 / S147963

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 95F
 QUANTITY INSPECTED: 95F
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.188"
 THICKNESS RECEIVED: 0.188"
 SHEET SIZE ORDERED: 3'x3'
 SHEET SIZE RECEIVED: 3'x3'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> N	<u>AMS 6350</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	<u>P0042340</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

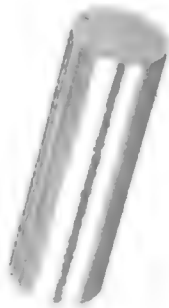
testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> <small>9-89</small> DATE: <u>19/01/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

Oil-Filled 841 Bearing Bronze Rod 1" Diameter

8932K45



Material	841 Bearing Bronze
Filler Material	SAE 30 Oil
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	1"
Tolerance Rating	Oversized
Yield Strength	11,000 psi
Fabrication	Pressed
Temper	Not Rated
Temper Rating	Not Rated
Hardness	Not Rated
Hardness Rating	Not Rated
Heat Treatable	No
Specifications Met	ASTM B438
Density	0.239 lbs./cu. in.
Melting Point Temperature	1800° F
Elongation	1%
Material Composition	
Carbon	0.3%
Copper	87.5-90.5%
Iron	1%
Tin	9.5-10.5%
Length	3 in., 6 1/2 in.
RoHS	Not Compliant

Powdered bronze is pressed and then impregnated with SAE 30 oil to make this material self-lubricating. Use it to make bearings and parts for hard-to-reach areas that would be difficult to access for lubrication, such as well pumps and

turbine blades.

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: OIL IMPREGNATED SINTERED BRONZE ROUND BAR

SPECIFICATION: SAE 841 TYPE 1, CLASS A OR
AMS 4905 OR
ASTM B438 GRADE 1, TYPE 2 OR
MIL-B-5600 TYPE 1, GRADE 1

PART NUMBER: MBRONZR0.DDD
DIA
WHERE "D.DDD" = DIAMETER IN INCHES
EG. 5/8 ROUND BAR = MBRONZR0.625

RELEASED
2011-07-19

A	NEW ISSUE	10.10.25	BY	DATE
REV	DESCRIPTION			
DESIGN	DESIGN			
DRAWN	DART AEROSPACE LTD			
CHECKED	HAWKESBURY, ONTARIO, CANADA			
MFG. APPR	DRAWING NO.			
APPROVED	MBRONZR			
DE APPR	TITLE			
DATE	10.10.25			
	BRONZE ROUND BAR			
	SCALE			
	NTS			
	COPYRIGHT © 2010 BY DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MBRONZE L-002
 DATE: 190128

PO / BATCH NO.: P0042340 / S147466

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 1.083ft
 QUANTITY INSPECTED: 1.083ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"
 THICKNESS RECEIVED: 1.000"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	ASTM B438
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	P0042340
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

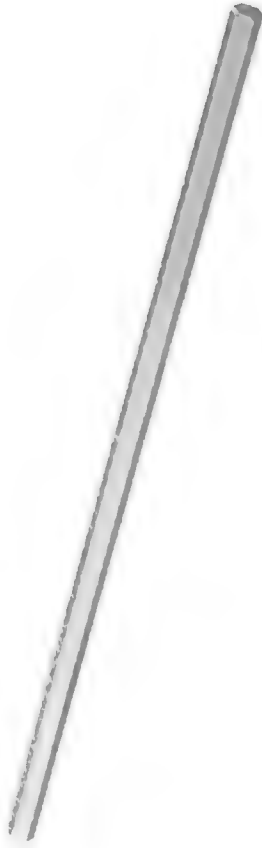
CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> 9-80	SIGNED OFF BY: _____
DATE: <u>190128</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

6061 Aluminum Hex Bar
5/16" Wide



6061 Aluminum Hex Bar, 5/16" Wide | McMaster-Carr

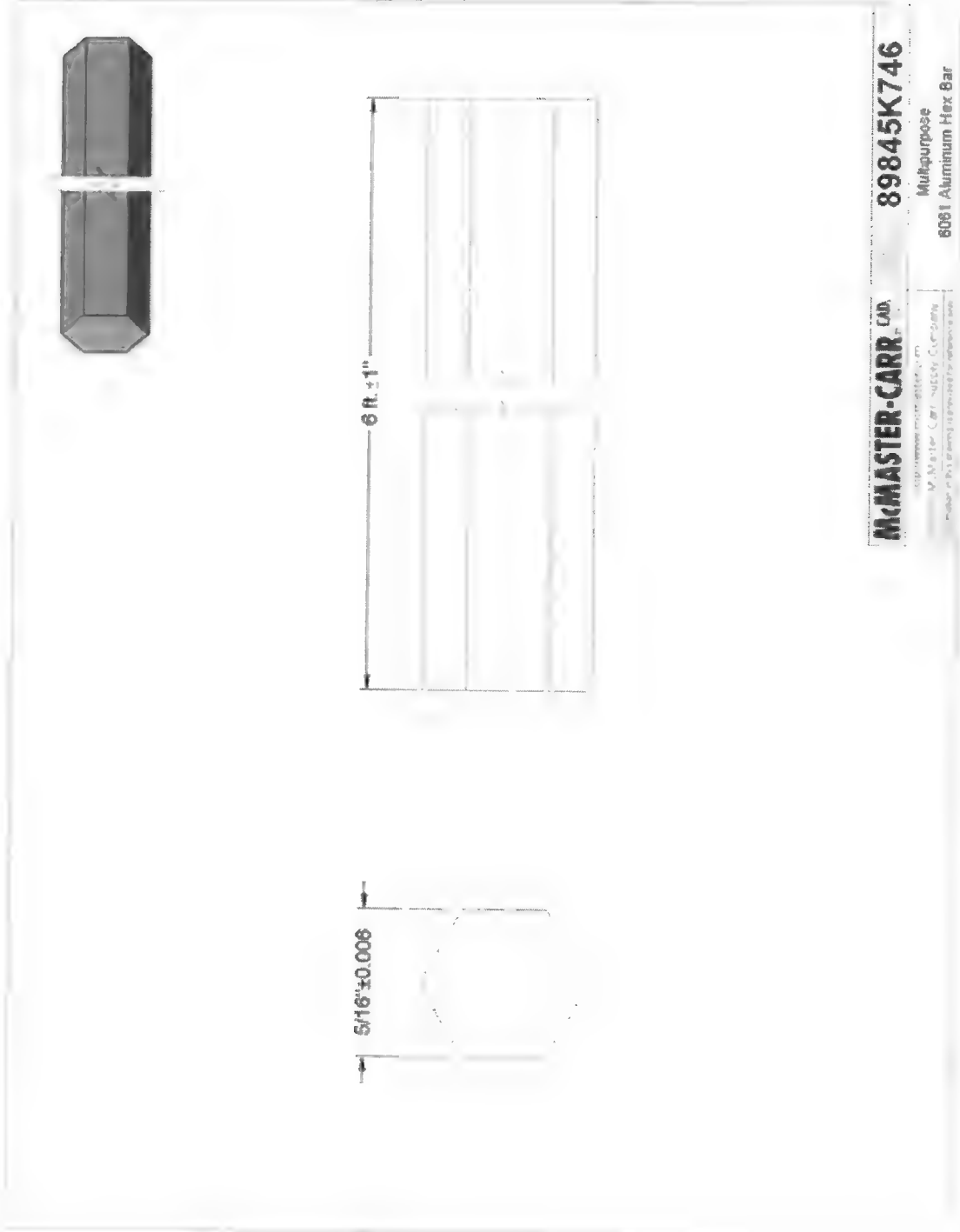
\$12.88 Each
89845K74

Material	6061 Aluminum
Cross Section Shape	Hexagon
Construction	Solid
Appearance	Plain
Width	5/16"
Width Tolerance	-0.006" to 0.006"
Tolerance Rating	Standard
Yield Strength	35,000 psi
Fabrication	Heat Treated
Temper	T6 (Hardened)
Hardness	Brinell 95
Hardness Rating	Soft
Heat Treatable	Yes
Temperature Range	-320° to 300° F
Specifications Met	ASTM B221
Straightness Tolerance	Not Rated
Magnetic Properties	Nonmagnetic
Density	0.1 lbs./cu. in.
Surface Resistivity	25 Ohm-Cir Mil/ft
Melting Point Temperature	1080° F
Modulus of Elasticity	10.0 ksi x 10 ³
Thermal Conductivity	1,390 Btu/hr. x in./sq. ft./°F @ 75° F
Elongation	12.5%
Material Composition	
Aluminum	95.1-98.2%
Chromium	0.4-0.8%
Copper	0.05-0.4%

Iron	0-0.7%
Magnesium	0.8-1.2%
Manganese	0-0.15%
Nickel	0-0.05%
Silicon	0.4-0.8%
Titanium	0-0.15%
Zinc	0-0.25%
Zirconium	0-0.25%
Other	0.15%
Length Tolerance	-1" to 1"
Length	6 ft.
RoHS	Not Compliant

Often fabricated into vehicle parts, pipe fittings, and containers, 6061 is stronger and offers better corrosion resistance than MIC6 and 2011. It's also nonmagnetic, heat treatable, and resists stress cracking.

Length, Feet : 6



McMASTER-CARR 89845K746

McMaster-Carr
6061 Aluminum Hex Bar
Multpurpose

The information in this 3-D model is provided for reference only.

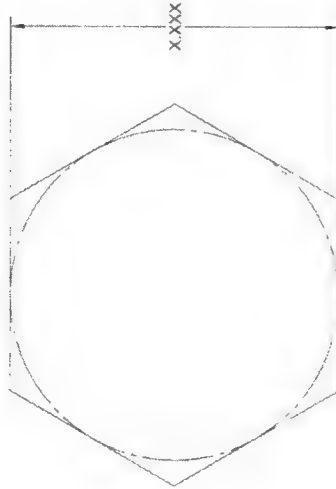
SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6 (6061-T651/T6510/T6511/T62 ALUMINUM HEX BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/6 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6H | X XXX
HEX
DIA.

WHERE "X.XXX" = INSCRIBED DIAMETER OF HEX BAR IN INCHES
EG. 0.5" HEX BAR = M6061T6H0.500



RELEASED
R 2009-09-09

B		REFORMAT DWG. ADD B211 & B221 SPEC (ZN D8-1). REF PAR 08-020A		Cp	09 07 13
A		NEW ISSUE		KJ	04 08 20
REV		DESCRIPTION		BY	DATE
DESIGN		DART AEROSPACE LTD			
DRAWN		HAWKESBURY, ONTARIO, CANADA			
CHECKED		DRAWING NO			REV. B
MFG. APPR		M6061T6H			SHEET 1 OF 1
APPROVED		TITLE			SCALE
DE APPR		6061-T6 HEX BAR			NTS
DATE		09.07.13		COPYRIGHT © 2004 BY DART AEROSPACE LTD	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 H0.312
 DATE: 1/9/28

PO / BATCH NO.: P0042340/5147468

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 64
 QUANTITY INSPECTED: 64
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.312
 THICKNESS RECEIVED: 0.312
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASTM B221
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0042340
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> 9-89	SIGNED OFF BY: _____
DATE: <u>1/9/28</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



White Delrin® Acetal Resin Oversized Bar
1-1/2" Thick, 3" Wide

In stock
\$44.78 per ft.
8739K67



Material	Delrin® Acetal Plastic
Cross Section Shape	Rectangle
Construction	Solid
Texture	Smooth
Color	White
Clarity	Opaque
Thickness	1 1/2"
Thickness Tolerance	0" to +0.025"
Tolerance Rating	Oversized
Width	3"
Width Tolerance	0" to +1/4"
Length	1 ft., 2 ft., 3 ft., 4 ft.
Backing Type	Plain
Hardness	Rockwell M90
Hardness Rating	Hard
For Use Outdoors	No
Temperature Range	-20° to 180° F
Impact Strength	1.00 ft.-lbs./in.
Impact Strength Rating	Good
Tensile Strength	9,000 psi
Tensile Strength Rating	Good
Specifications Met	ASTM D6100, Made of FDA Listed Material, NSF/ANSI Standard 51 for Food Contact, NSF/ANSI Standard 61 for Drinking Water
Density	0.051 lbs./cu. in.
Coefficient of Friction	0.20
Dielectric Strength	435 V/mil

Water Absorption	0.30%
Coefficient of Thermal Expansion	8.5×10^{-5} in./in./°F
RoHS	Compliant

These sheets, bars, and strips are made of Delrin® acetal resin, a wear-resistant material with a naturally slippery surface. Also known as acetal homopolymer, it resists moisture and has the ability to hold tight tolerances. It's often used for gears, bushings, and bearings.



DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED P	APPROVED #	DRAWING NO. M-DELIN-B	REV. A SHEET 1 OF 1
DATE 02.04.30		TITLE DELIN BAR	SCALE NTS
A	02.04.30	NEW ISSUE	
AI	02.06.04	ADD "ACETRON GP ACETAL" AS OPTION	

PURCHASE MATERIAL:

DELIN II ISOE OR ACETRON GP ACETAL

PART NUMBER:

M-DELIN-B | T.TTT | x | WW.WWW | WHERE T.TTT = THICKNESS (IN INCHES)
THICK | WIDTH | WW.WWW = WIDTH (IN INCHES)

EG. 0.5" x 1.0" BAR = M-DELIN-B 0.500 x 01.000

RELEASED
02/05/06 #

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MDLEL10B1 500x3000W

PO / BATCH NO.: P0042340/S147969

DATE: 1/20/28

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.500"

QUANTITY RECEIVED: 12ft

THICKNESS RECEIVED: 1.500"

QUANTITY INSPECTED: 12ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	DELFIN
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0042340
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

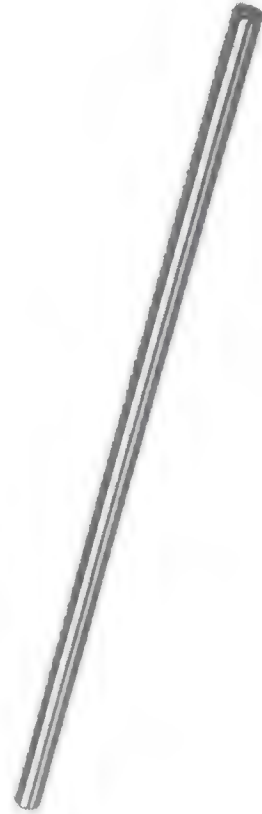
testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 61</u> DATE: <u>1/20/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Black Delrin® Acetal Resin Rod
3/8" Diameter, 5 Feet Long



\$0.74 per ft. of 5
8576K13

Material	Delrin® Acetal Plastic
Cross Section Shape	Round
Construction	Solid
Texture	Smooth
Color	Black
Clarity	Opaque
Diameter	3/8"
Diameter Tolerance	0" to +0.005"
Tolerance Rating	Oversized
Length	5 ft.
Hardness	Rockwell M90
Hardness Rating	Hard
For Use Outdoors	No
Temperature Range	-20° to 180° F
Impact Strength	1.00 ft.-lbs./in.
Impact Strength Rating	Good
Tensile Strength	9,000 psi
Tensile Strength Rating	Good
Specifications Met	ASTM D6100
Density	0.051 lbs./cu. in.
Coefficient of Friction	0.20
Dielectric Strength	435 V/mil
Water Absorption	0.30%
Coefficient of Thermal Expansion	8.5 x 10 ⁻⁵ in./in./°F
RoHS	Compliant

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : DELRIN 1150E OR ACETRON GP ACETAL

PART NUMBER : M-DELRIN-R D.DDD X COLOR CODE
DIA

WHERE D.DDD = DIAMETER IN INCHES
X = COLOR CODE, "W" = WHITE, OMITTED = BLACK
EG. 1" BLACK ROUND BAR = M-DELRIN-R1.000
2" WHITE ROUND BAR = M-DELRIN-R2.000W

RELEASED
2018 MAR 27 4P
EJ 18-657

APPROVED

B	UPDATE DRAWING TO CURRENT STANDARDS. ADD MATERIAL CODES TO PART NUMBER. ADD "ACETRON GP ACETAL" AS OPTION (REV. A1).	SAD	SAD	17.10.19
A	NEW ISSUE	DS	BY	01.11.12
REV	DESCRIPTION	DATE		
DESIGN	SAD	DART AEROSPACE LTD		
DRAWN	SAD	HAYKESBURY, ONTARIO, CANADA		
CHECKED	RF	DRAWING NO.		
MFG. APPR.	RA	M-DELRIN-R		
APPROVED	HS	TITLE		
DE APPR.	CP 40	DELIN ROUND BAR		
DATE	17.10.19	SHEET 1 OF 1		
		SCALE		
		NTS		
DART AEROSPACE LTD 10000 100TH AVE. UNIT 100, HAYKESBURY, ONTARIO, CANADA 416-731-1000 FAX 416-731-1001				

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MDRELINR0.375
 DATE: 19/01/28

PO / BATCH NO.: P0042340/S147970

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 54
 QUANTITY INSPECTED: 54
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.375"
 THICKNESS RECEIVED: 0.375"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	DELIN
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	P0042340
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS 61</u>	SIGNED OFF BY: _____		
DATE: <u>19/01/28</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Ultra-Machinable 360 Brass Rod
9/16" Diameter

8953K91



Material	360 Brass
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	9/16"
Diameter Tolerance Range	-0.003" to 0.003"
Tolerance Rating	Standard
Yield Strength	15,000 psi
Fabrication	Cold Worked
Temper	H02
Temper Rating	1/2 Hard
Hardness	Rockwell B25 (Soft)
Heat Treatable	No
Specifications Met	ASTM B16
Density	0.307 lbs./cu. in.
Surface Resistivity	39.9 Ohms
Melting Point Temperature	1630° F
Modulus of Elasticity	14.0 ksi × 10 ³
Thermal Conductivity	67 Btu/hr.-ft.-°F @ 68° F
Elongation	25%
Material Composition	
Copper	60-63%
Iron	0-0.35%
Lead	2.5-3.7%
Silicon	0-0.17%
Zinc	32.95-37.15%
Length Tolerance Range	-0.5" to 0.5"

Length	1/2 ft., 1 ft., 2 ft., 3 ft., 6 ft.
RoHS	Not Compliant

With the highest lead content of all the brass alloys, 360 offers the best machinability. Often called free-machining and free-cutting brass, it stands up to high-speed drilling, milling, and tapping operations with minimal wear on your tools. It's commonly used for gears, pinions, and lock components.

8 7 6 5 4 3 2 1

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	17-732	17.11.22	VM	WM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

SPECIFICATION:

PART NUMBER:

EXAMPLE:

C360 BRASS
ASTM B16
MT-BRASS-C360-R-[D.DDD]

WHERE D.DDD IS DIAMETER IN INCHES

MT-BRASS-C360-R-0.250

TOLERANCES PER MANUFACTURER SPECIFICATIONS

DART AEROSPACE		Dartmouth, Ontario, Canada	
TITLE: BRASS C360 ROUND BAR			
DESIGN NO.	REV	REV	
MT-BRASS-C360-R	A	A	
DESIGN BY:	DATE	DATE	
VM 11/1/2017	11/1/2017	11/1/2017	
DRAWN BY:	DATE	DATE	
VM 11/1/2017	11/1/2017	11/1/2017	
CHECKED:	DATE	DATE	
SAC 11/06/2017	11/06/2017	11/06/2017	
WFO APPL:	DATE	DATE	
10/2/11/10/2017	11/10/2017	11/10/2017	
DATE:	DATE	DATE	
11/7/2017	11/7/2017	11/7/2017	
SCALE:	UNIT	UNIT	
NIS	N/A	N/A	
SHEET 1 OF 1			
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8 7 6 5 4 3 2 1

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-BRASS-C360-R0.5625

PO / BATCH NO.: P0042340/S147973

DATE: 19/01/28

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.5625"

QUANTITY RECEIVED: 6.4

THICKNESS RECEIVED: 0.5625"

QUANTITY INSPECTED: 6ft

SHEET SIZE ORDERED:

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM B16
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	P0042340
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<div style="color: blue; font-weight: bold; font-size: 1.2em;">61</div> <div style="color: blue; font-weight: bold;">9-80</div>	SIGNED OFF BY:	
DATE:	19/01/28	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in